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10/589,845

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Stephen Gilbert

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EXAMINER

FAN, CHARLES C

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/589,845

Applicant(s)

GILBERT ET AL.

Examiner

CHARLES FAN

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-US)
Paper No(s)/Mail Date 1/29/2007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8, 15, 26, are rejected under 35 U.S.C. 102(b) as being anticipated by Benton et al. (US Pat. No. 5,706,455).

In re claim 1, Benton et al. discloses a computer readable memory (Fig. 4, 160), and a display object stored (Fig. 4, 120) on the computer readable memory and adapted to be executed on a processor (Fig. 3, 50), the display object including: a property memory adapted to store a value of a property associated with the process entity (Column 4, lines 33-41), a graphic representation of the process entity adapted to be displayed to a user on a display device when the display object is executed on a processor (Fig. 3, 50), and a routine that operates in conjunction with the graphic representation of the-process entity displayed to the user and that is associated with the value of the property (Column 3 line 62 to Column 4 line 41).

In re claim 8, Benton et al. discloses reference that connects a property value to a data source within the process plant (Column 4, lines 32-41).

In re claim 15, Benton et al. discloses a library of graphic objects, each graphic object including a visual representation of a physical or a local entity within the process plant (Fig. 4, 120), a graphically based editor canvas routine that enables a user to define an executable graphic display by placing one or more visual representations of the graphic objects from the

library of graphic objects onto an edit-canvas to define a manner in which the one or more visual representations of the graphic objects will be displayed on a display device to a user during execution of the graphic display (Column 9, lines 27-54), a property definition canvas routine adapted to enable a user to define a property associated with at least one of the plurality of graphic objects; a binding definition routine adapted to enable a user to specify a binding between the property and a runtime environment within the process plant (Column 9, lines 27-54), and a definition routine adapted to enable a user to define a routine that operates in conjunction with the visual representation of one of the graphic objects and the property drawing execution of the graphic display (Column 3 line 62 to Column 4 line 41).

In re claim 26, Benton et al. discloses plurality of graphical objects interconnected together to form a visual representation of at least a portion of the process plant (Column 9, lines 27-54), a property memory adapted to store a value for a property associated with at least one of the plurality of graphical objects (Column 4, lines 33-41), a binding that binds the property memory to a runtime environment within the process plant to receive data associated with the property to determine the value of the property (Column 4, lines 33-41) and a routine that operates in conjunction with respect to the visual representation of at least one of the plurality of graphic objects and the value of the property (Column 3 line 62 to Column 4 line 41).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 2-6, 9-14, 16-25, 27-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benton et al. (US Pat. No. 5,706,455) in further view of Joseph et al. (US pat. No. 5,485,600).

In re claims 2, 16, 27, it is noted that Benton et al. does not explicitly disclose an animation routine that animates the graphic representations. However, Joseph et al. discloses an animation routine that animates the graphic representations in response to changes in data values (Column 7, lines 50-55). It would have been obvious to one of ordinary skill to combine the animation of Joseph et al. with the graphic representation of Benton et al. with the motivation of dynamic control systems and easily know the status of a device.

In re claims 3, 17, 28, Benton et al. discloses continuous update of value and states (Column 10, lines 39-67).

In re claims 4, 18, 29, it is noted that Benton et al. does not disclose the animation routine applying at least one of a skew, rotation, a translation and resizing to the graphic representation. However, Joseph et al. discloses animation routine applying at least one of a skew, rotation, a translation and resizing to the graphic representation. (Column 7, lines 43-50). It would have

been obvious to one of ordinary skill to combine the animation of Joseph et al. with the graphic representation of Benton et al. with the motivation of dynamic control systems and easily know the status of a device.

In re claims 5, 19, 30, it is noted that Benton et al. does not disclose the animation routine applying at least one a color animation, or a color gradient animation, or an opacity animation, or a font characteristic animation, or a video property the graphic representation. However, Joseph et al. discloses animation routine applying at least one a color animation, or a color gradient animation, or an opacity animation, or a font characteristic animation, or a video property the graphic representation (Column 7, lines 43-50). It would have been obvious to one of ordinary skill to combine the animation of Joseph et al. with the graphic representation of Benton et al. with the motivation of dynamic control systems and easily know the status of a device.

In re claim 6, 31, it is noted that Benton et al does not explicitly disclose the graphic representation includes two or more primitives and wherein the routine changes a property of one of the primitives. However Joseph et al. discloses graphic representation includes two or more primitives (Fig. 29) and wherein the routine changes a property of one of the primitives (Column 19, lines 32-39). It would have been obvious to one of ordinary skill to combine the graphical representation of Benton with the multiple graphic primitives with a routine which changes a property of a graphic primitive of Joseph et al with the motivation of having a multitude of different controls in a process system.

In re claims 9, 20, 32, it is noted that Benton et al. does not explicitly disclose the routine is an executable routine that transforms the property value from the data source within the process plant. However, Joseph et al. discloses transforming data into a light turning on and off

(Column 11, lines 52-64). It would have obvious to one of ordinary skill to combine the use the connection between virtual and physical property values as in Benton et al. and transform it to a simple light of Joseph et al with the motivation of simple reading of the interface.

In re claims 10, 21, 33, it is noted that Benton et al. does not explicitly disclose transforming the property value to a color or to one of the enumerated list of value or to a length or to a font name or to a localized string, or to a duration or a rotation. However, Joseph et al. discloses transforming data into a light turning on and off (Column 11, lines 52-64). It would have obvious to one of ordinary skill to combine the use the connection between virtual and physical property values as in Benton et al. and transform it to a simple light of Joseph et al with the motivation of simple reading of the interface.

In re claims 11, 22, 34, it is noted that Benton et al. does not explicitly disclose detecting a condition with a change in graphic presentation. However, Joseph et al. discloses detecting a condition and change the graphic representations (Column 11, lines 52-64, the condition of the speed knob being over 500 turns on the light to white instead of black). It would have obvious to one of ordinary skill to combine the use the connection between virtual and physical property values as in Benton et al. and the condition detection Joseph et al with the motivation of having a dynamic control system.

In re claims 12, 23, 35, it is noted that Benton et al. does not explicitly disclose the detected condition relates to a communication status, or a device status, or a value status. However, Joseph et al. discloses the detecting a value status (Column 11, lines 52-64, the value of the knob speed is betting checked for status). It would have obvious to one of ordinary skill to

combine the use the connection between virtual and physical property values as in Benton et al. and the condition detection Joseph et al with the motivation of having a dynamic control system.

In re claims 13, 24, 36, it is noted that Benton et al. does not explicitly disclose user input from the user via graphic visualization. However Joseph et al. discloses user input from the user via graphic virtualization (Column 11, lines 52-64, user can turn the knob).). It would have obvious to one of ordinary skill to combine the control and monitoring of Benton et al. with the input by the user of Joseph et al. with the motivation of an interactive control system

In re claims 14, 25, 37, Benton et al. discloses reference that connects a property value to a data source within the process plant (Column 4, lines 32-41). It is noted that Benton et al does not explicitly disclose the input causes a change to the property value to effect a runtime environment exterior to the display entity. However, Joseph et al discloses user input from the user to change values (Column 11, lines 52-64, user can turn the knob). It would have been obvious to one of ordinary skill to combine the connection to virtual devices of Benton et al. with the user inputs of Joseph et al. with the motivation of having an the user interface control the physical device.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benton et al. (US Pat. No. 5,706,455) in further view of Joseph et al. (US pat. No. 5,485,600) and Hotine (US Pat. No. 4,244,385)

In re claim 7, it is noted that Benton et al and Joseph et al. do not disclose a property is a fill property. However, Hotine discloses controlling a tanks fill property (Column 3, line 57-69). It would have been obvious to one of ordinary skill for the graphic symbols of Benton et al and also run a fill property of Hotine with the motivation of controlling a tanks fill level.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Verissimo (US Pat. No. 5,841,654) discloses network based configuration and control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES FAN whose telephone number is (571)270-3550. The examiner can normally be reached on mon- fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571)272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/XIAO M. WU/

Supervisory Patent Examiner, Art Unit 2628